

Lab Manual 08

Lab task submission

Task 01

```
#include <iostream> using
namespace std;

int main ()
{
    int n,i;

    double array[1000],sum(0),avg;

    cout<<"enter the number of terms \n";

    cin>>n;    if(n<0){
    cout<<"enter positive number \n";

        cin>>n;

    }

    else{

        cout<<"enter the terms\n";

        for(i=0;i<n;i++){

            cin>>array[i];

            sum+=array[i];

        }

        avg=sum/n;

        cout<<avg;

    }

}
```

```
C:\Users\TALHA SANGRASI\O  ×  +  ∨  
enter the number of terms  
5  
enter the terms  
1  
2  
3  
4  
6  
3.2  
-----  
Process exited after 7.389 seconds with return value 0  
Press any key to continue . . . |
```

Task 02

```
#include <iostream> using
```

```
namespace std;
```

```
int main()
```

```
{
```

```
    int n;
```

```
    int array[n];
```

```
    int i,j,s,k;
```

```
    char x;
```

```
    do{
```

```
        cout<<"Input element to array: "<<endl;
```

```
        cin>>array[n];
```

```
        n++;
```

```
        cout<<"Do you want to continue. Input y if yes"<<endl;
```

```
        cin>> x;
```

```
    }while(x=='y');
```

```
    for (int step = 0; step < n; step++) {
```

```
for (int i = 0; i < n - step; i++) {  
  
    if (array[i] > array[i + 1]) {  
  
        int temp = array[i];  
array[i] = array[i + 1];  
array[i + 1] = temp;  
    }  
    }  
}  
for(int l = 0; l<n; l++){  
    cout<<array[l]<<' '  
    }  
}
```

```
C:\Users\TALHA SANGRASI\O x + v
Input element to array:
4
Do you want to continue. Input y if yes
y
Input element to array:
2
Do you want to continue. Input y if yes
y
Input element to array:
8
Do you want to continue. Input y if yes
y
Input element to array:
1
Do you want to continue. Input y if yes
y
Input element to array:
3
Do you want to continue. Input y if yes
y
Input element to array:
2
Do you want to continue. Input y if yes
n
1 2 2 3 4 8
-----
Process exited after 32.23 seconds with return value 0
Press any key to continue . . . |
```

Task 03

```
#include<iostream> using
namespace std;
int main()
{
    int n, arr[50], i, j, temp, small, k, index;
    cout<<"Enter the Size of Array: ";    cin>>n;
```

```

    cout<<"Enter "<<n<<" Array Elements: ";

    for(i=0; i<n; i++)
cin>>arr[i];    for(i=0;
i<(n-1); i++)
    {
        k=0;    small =
arr[i];    for(j=(i+1);
j<n; j++)
        {
            if(small>arr[j])
            {
                small = arr[j];
k++;    index =
j;
            }
        }
        if(k!=0)
        {
            temp = arr[i];
arr[i] = small;
arr[index] = temp;
        }
    }

    cout<<"\nSorted Array is:\n";

    for(i=0; i<n; i++)
cout<<arr[i]<<" ";
cout<<endl;    return
0;}

```



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Enter the Size of Array: 5

Enter 5 Array Elements: 3

4

2

8

9

Sorted Array is:

2 3 4 8 9

Process exited after 9.334 seconds with return value 0

Press any key to continue . . . |

Home task submission

Task 01

```
#include <iostream>

using namespace std;

int main()
{
    int
n(10),j,t,e,k,m(1),r,i;

    int
array[10]={1,2,3,2,3,89,2,
6,3,3};

    cout<<"the array
is\n";

    for(i=0;i<n;i++){

        cout<<array[i]<<"
";

    }

    for(k=0;k<n-
1;k++){

        e=array[k];

        t=1;

        for(j=k+1;j<n;j++){

            if(array[j]==e){

                t++;
```

```

        }
    }

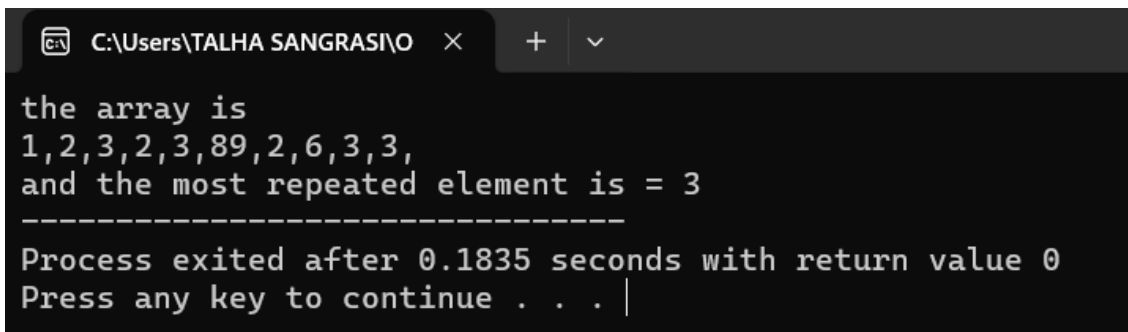
    if(t>m){
        m=t;
        r=e;
    }
}

cout<<endl;

    cout<<"and the
most repeated element is
= "<<r;

}

```



```

C:\Users\TALHA SANGRASI\O
the array is
1,2,3,2,3,89,2,6,3,3,
and the most repeated element is = 3
-----
Process exited after 0.1835 seconds with return value 0
Press any key to continue . . . |

```

Task 02

```

#include <iostream>

using namespace std;

int main()
{
    int i,j,k,s,l;

```



```

int array[]={13, 15, 17, 9,
99, 77, 65, 43};

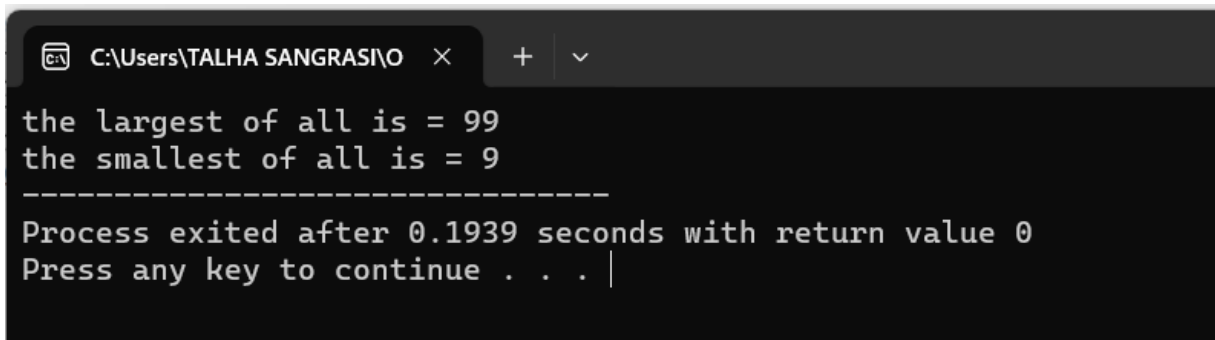
s=l=array[0];

for(i=1;i<8;i++){
    if(array[i]<s){
        s=array[i];
    }
    else if(array[i]>l){
        l=array[i];
    }
}

cout<<"the largest of all is
="<<l<<endl;

cout<<"the smallest of all
is ="<<s;
}

```



```

C:\Users\TALHA SANGRASI\O  ×  +  ▾
the largest of all is = 99
the smallest of all is = 9
-----
Process exited after 0.1939 seconds with return value 0
Press any key to continue . . . |

```

Task 03

```

#include <iostream>

using namespace std;

int main()
{

```

```

    int array[5];

    int i,j,e;

    cout<<"enter five
elements\n";

    for(i=0;i<5;i++){

        cin>>array[i];

    }

    cout<<"you
entered \n";

    for(i=0;i<5;i++){

        cout<<array[i]<<"
";

    }

    e=array[1];

    array[1]=array[3];

    array[3]=e;

    cout<<endl<<"swa
pping 2nd and 4th
element we get \n";

    for(i=0;i<5;i++){

        cout<<array[i]<<"
";

    }

}

```



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enter five elements

1

3

4

8

90

you entered

1,3,4,8,90,

swapping 2nd and 4th element we get

1,8,4,3,90,

Process exited after 10.84 seconds with return value 0

Press any key to continue . . . |